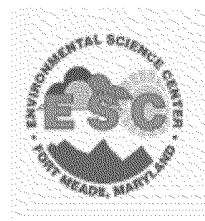




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Office of Analytical Services and Quality Assurance
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Site Name: Super salvage

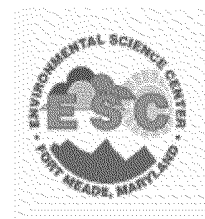
Project #: NSF 647

Report Narrative



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Site Name: Super salvage

Project #: NSF 647

Report Narrative**SVOAs Analysis Note:**

The sample consisted of two layers, oil-like top layer and water-like bottom layer. Continuous liquid-liquid extraction of both layers due to the oil-like top layer was not possible. So the layers were separated as best as possible and two separate samples were made in the lab. 1306003-05 is the top layer and 1306003-06 is the bottom layer. Separation was not perfect resulting in some of the top layer present in the bottom layer. 1306003-05 was extracted following EPA Method 3580A while 1306003-06 was extracted following EPA Method 8270D.

Present in the sample was a very large broad peak. Cleanup of the sample did not remove the peak and dilution of the sample resulted only in the peak disappearing. The peak is the most significant peak in the spectrum and is taller than the internal standards and ranges from about 8 minutes to 14 minutes. A TIC identification of something so broad cannot be precise though it does contain the characteristics of a hydrocarbon.

Results for 2,4-dinitrophenol are qualified as estimated (UJ) in all samples due to exceeding limits in initial calibration.

4,6-dinitro-2-methylphenol is qualified as estimated (UJ) in 1306003-06 due to outside low limits in the blank spike.

4-nitrophenol is qualified as estimated (UJ) in 1306003-05 due to outside low limits in the blank spike. The mid-level blank spike for the analysis of the top layer went to dryness during concentration and no information was used to qualify sample 1306003-05.

Not enough sample was provided to perform matrix spike duplicate.

DRO Analysis Note:

One aqueous sample was received at the ESC on 5/30/13. The sample was composed of two distinct layers, a lower aqueous layer and an oily layer floating on top of the aqueous layer. The oily layer was approximately 1 inch in thickness (the top layer weighed 98.8g). The top oily layer was siphoned off and a small amount of it (~0.1g) was analyzed as a petroleum product via EPA 3580A (1306003-05). The bottom aqueous layer was analyzed by continuous liquid extraction via EPA 3520C (1306003-06).

Surrogate recovery failed quality control criteria for 1306003-05, 1306003-06, BF32003-MS1, and BF32003-MSD1 (0% recovery for all). The surrogate failure was due to extreme matrix interferences that were present in both samples. The surrogate failure was qualified with an "A" for each. The DRO results for 1306003-05 and 1306003-06 were qualified as estimates "J" because of this failure.

BF32003-MSD1 was qualified "A" because it failed recovery and relative percent difference quality control criteria. The failure was due to extreme matrix interferences.

A matrix spike and matrix spike duplicate could not be performed on the aqueous samples (1306003-06) because of lack of sample volume.

This analysis was performed according to the ESC's on-demand procedures.

The following data provides a rough estimate of the amount of DROs in the complete two-layer sample:

Oily Layer (1306003-05)

Total weight of Oily Layer = 98.822 g

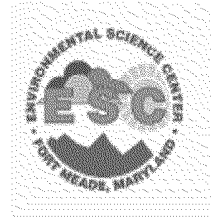
Concentration of Oily Layer = 241,000 mg/Kg

Total Weight of DRO in Oily Layer = 23,800 mg



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**Site Name:** Super salvage**Project #:** NSF 647**Report Narrative****Aqueous Layer (1306003-06)**

Total Volume of Aqueous Layer = 880 mL

Concentration of Aqueous Layer = 398,000 ug/L

Total Weight of DRO in Aqueous Layer = 350.2 mg

TOTAL WEIGHT OF DRO IN THE SAMPLE JAR = 24150.2 mg

Metals Analysis Note (for TCLP samples):

Sample SS5 was composed of two distinct layers, a lower aqueous layer (1306003-06) and an oily layer (1306003-05) floating on top. The layers were separated by siphoning as much of the oil layer, as possible, off of the water layer. Each layer was analyzed separately for Total Metals.

The Blank Spike failed for lead; however, the Matrix Spike and SRM were acceptable. There should be no impact on the data.

Total Metals Analysis Note (for non-TCLP sample):

Samples 1306003-01 thru -04 were analyzed "wet weight", as received, because of their unique matrices, which were not amenable to drying.

The Blank Spike recovery exceed criteria for lead for sample 1306003-05; however, the Matrix Spike and SRM are acceptable. There should be no impact on the data.

Total Mercury Analysis Note (for non-TCLP sample):

The matrix spike result for mercury was qualified as failing with an "A". This failure was due to matrix effects caused by a coating of oil that was present on the entire soil sample. The corresponding source sample result (1306003-04) was qualified as an estimate "J" because of this failure.

Sample 1306003-04 was analyzed "wet weight", as received, because of its' unique matrix which was not amenable to drying.

Sample 1306003-04 was analyzed out of holding time. The sample result should be considered an estimate and was qualified as such with a "J".



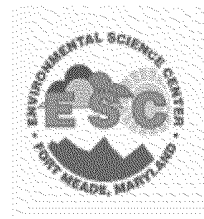
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Site Name: Super salvage

Project #: NSF 647

ANALYTICAL REPORT FOR SAMPLES

| Station ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|------------|---------------|-----------|---------------|---------------|
| SS1 | 1306003-01 | Solid | 5/29/13 09:25 | 5/30/13 14:00 |
| SS2 | 1306003-02 | Solid | 5/29/13 10:12 | 5/30/13 14:00 |
| SS3 | 1306003-03 | Solid | 5/29/13 09:45 | 5/30/13 14:00 |
| SS4 | 1306003-04 | Solid | 5/29/13 11:15 | 5/30/13 14:00 |
| SS5 | 1306003-05 | Petroleum | 5/29/13 11:35 | 5/30/13 14:00 |
| SS5 | 1306003-06 | Water | 5/29/13 11:35 | 5/30/13 14:00 |



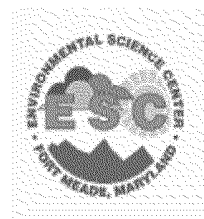
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**Site Name:** Super salvage**Project #:** NSF 647**Station ID:** SS1**Lab ID:** 1306003-01**Sample Matrix:** Solid**Date Collected:** 05/29/2013**Total Metals****Targets**

| Analyte | Result ug/g | Flags Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|----------|----------------|---------------------|-----------------------|----------|----------|----------------|-----------------|
| Arsenic | U | | 199 | 10 | 07/11/13 | 07/17/13 12:52 | SW6010B/R3QA159 |
| Barium | 271 | | 199 | 10 | 07/11/13 | 07/17/13 12:52 | SW6010B/R3QA159 |
| Cadmium | 7.3 | | 5.0 | 10 | 07/11/13 | 07/17/13 12:52 | SW6010B/R3QA159 |
| Chromium | 2040 | | 10.0 | 10 | 07/11/13 | 07/17/13 12:52 | SW6010B/R3QA159 |
| Lead | 1560 | | 49.8 | 10 | 07/11/13 | 07/17/13 12:52 | SW6010B/R3QA159 |
| Selenium | U | | 199 | 10 | 07/11/13 | 07/17/13 12:52 | SW6010B/R3QA159 |
| Silver | 75.5 | | 10.0 | 10 | 07/11/13 | 07/17/13 12:52 | SW6010B/R3QA159 |

TCLP Extracted Metals**Targets**

| Analyte | Result mg/L | Flags Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|----------|----------------|---------------------|-----------------------|----------|----------|----------------|------------------|
| Arsenic | U | | 0.800 | 4 | 06/19/13 | 06/25/13 12:39 | EPA 1311/R3QA159 |
| Barium | 0.831 | | 0.800 | 4 | 06/19/13 | 06/25/13 12:39 | EPA 1311/R3QA159 |
| Cadmium | 0.080 | | 0.050 | 10 | 06/19/13 | 06/25/13 12:39 | EPA 1311/R3QA159 |
| Chromium | U | | 0.150 | 10 | 06/19/13 | 06/25/13 12:39 | EPA 1311/R3QA159 |
| Lead | U | | 0.200 | 4 | 06/19/13 | 06/25/13 12:39 | EPA 1311/R3QA159 |
| Selenium | U | | 2.00 | 10 | 06/19/13 | 06/25/13 12:39 | EPA 1311/R3QA159 |
| Silver | U | | 0.040 | 4 | 06/19/13 | 06/25/13 12:39 | EPA 1311/R3QA159 |



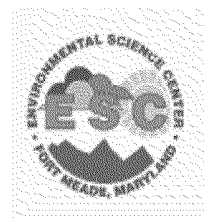
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Site Name: Super salvage

Station ID: SS2

Sample Matrix: Solid

Project #: NSF 647

Lab ID: 1306003-02

Date Collected: 05/29/2013

Total Metals

Targets

| Analyte | Result ug/g | Flags Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|----------|----------------|---------------------|-----------------------|----------|----------|----------------|-----------------|
| Arsenic | U | | 200 | 10 | 07/11/13 | 07/17/13 13:01 | SW6010B/R3QA159 |
| Barium | 285 | | 200 | 10 | 07/11/13 | 07/17/13 13:01 | SW6010B/R3QA159 |
| Cadmium | 10.4 | | 5.0 | 10 | 07/11/13 | 07/17/13 13:01 | SW6010B/R3QA159 |
| Chromium | 417 | J | 10.0 | 10 | 07/11/13 | 07/17/13 13:01 | SW6010B/R3QA159 |
| Lead | 3140 | | 50.0 | 10 | 07/11/13 | 07/17/13 13:01 | SW6010B/R3QA159 |
| Selenium | U | | 200 | 10 | 07/11/13 | 07/17/13 13:01 | SW6010B/R3QA159 |
| Silver | 116 | | 10.0 | 10 | 07/11/13 | 07/17/13 13:01 | SW6010B/R3QA159 |

TCLP Extracted Metals

Targets

| Analyte | Result mg/L | Flags Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|----------|----------------|---------------------|-----------------------|----------|----------|----------------|------------------|
| Arsenic | U | | 0.800 | 4 | 06/19/13 | 06/25/13 12:44 | EPA 1311/R3QA159 |
| Barium | U | | 0.800 | 4 | 06/19/13 | 06/25/13 12:44 | EPA 1311/R3QA159 |
| Cadmium | U | | 0.020 | 4 | 06/19/13 | 06/25/13 12:44 | EPA 1311/R3QA159 |
| Chromium | U | | 0.060 | 4 | 06/19/13 | 06/25/13 12:44 | EPA 1311/R3QA159 |
| Lead | U | | 0.200 | 4 | 06/19/13 | 06/25/13 12:44 | EPA 1311/R3QA159 |
| Selenium | U | | 0.800 | 4 | 06/19/13 | 06/25/13 12:44 | EPA 1311/R3QA159 |
| Silver | U | | 0.040 | 4 | 06/19/13 | 06/25/13 12:44 | EPA 1311/R3QA159 |



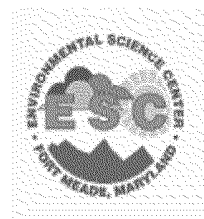
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**Site Name:** Super salvage**Project #:** NSF 647**Station ID:** SS3**Lab ID:** 1306003-03**Sample Matrix:** Solid**Date Collected:** 05/29/2013**Total Metals****Targets**

| Analyte | Result ug/g | Flags Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|----------|----------------|---------------------|-----------------------|----------|----------|----------------|-----------------|
| Arsenic | U | | 194 | 10 | 07/11/13 | 07/17/13 13:11 | SW6010B/R3QA159 |
| Barium | 279 | | 194 | 10 | 07/11/13 | 07/17/13 13:11 | SW6010B/R3QA159 |
| Cadmium | 14.2 | | 4.9 | 10 | 07/11/13 | 07/17/13 13:11 | SW6010B/R3QA159 |
| Chromium | 2190 | | 9.7 | 10 | 07/11/13 | 07/17/13 13:11 | SW6010B/R3QA159 |
| Lead | 1700 | | 48.5 | 10 | 07/11/13 | 07/17/13 13:11 | SW6010B/R3QA159 |
| Selenium | U | | 194 | 10 | 07/11/13 | 07/17/13 13:11 | SW6010B/R3QA159 |
| Silver | 49.2 | | 9.7 | 10 | 07/11/13 | 07/17/13 13:11 | SW6010B/R3QA159 |

TCLP Extracted Metals**Targets**

| Analyte | Result mg/L | Flags Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|----------|----------------|---------------------|-----------------------|----------|----------|----------------|------------------|
| Arsenic | U | | 0.800 | 4 | 06/19/13 | 06/25/13 12:54 | EPA 1311/R3QA159 |
| Barium | U | | 0.800 | 4 | 06/19/13 | 06/25/13 12:54 | EPA 1311/R3QA159 |
| Cadmium | 0.558 | | 0.020 | 4 | 06/19/13 | 06/25/13 12:54 | EPA 1311/R3QA159 |
| Chromium | 0.165 | | 0.060 | 4 | 06/19/13 | 06/25/13 12:54 | EPA 1311/R3QA159 |
| Lead | 4.26 | | 0.200 | 4 | 06/19/13 | 06/25/13 12:54 | EPA 1311/R3QA159 |
| Selenium | U | | 0.800 | 4 | 06/19/13 | 06/25/13 12:54 | EPA 1311/R3QA159 |
| Silver | 0.053 | | 0.040 | 4 | 06/19/13 | 06/25/13 12:54 | EPA 1311/R3QA159 |



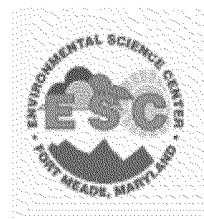
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**Site Name:** Super salvage**Project #:** NSF 647**Station ID:** SS4**Lab ID:** 1306003-04**Sample Matrix:** Solid**Date Collected:** 05/29/2013**Total Metals****Targets**

| Analyte | Result ug/g | Flags Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|----------|----------------|---------------------|-----------------------|----------|----------|----------------|-------------------|
| Arsenic | U | | 73.1 | 10 | 07/11/13 | 07/17/13 13:16 | SW6010B/R3QA159 |
| Barium | 92.7 | | 73.1 | 10 | 07/11/13 | 07/17/13 13:16 | SW6010B/R3QA159 |
| Cadmium | 9.4 | | 1.8 | 10 | 07/11/13 | 07/17/13 13:16 | SW6010B/R3QA159 |
| Chromium | 63.5 | | 3.7 | 10 | 07/11/13 | 07/17/13 13:16 | SW6010B/R3QA159 |
| Lead | 1120 | | 18.3 | 10 | 07/11/13 | 07/17/13 13:16 | SW6010B/R3QA159 |
| Mercury | 2.8 | J | 0.2 | 2 | 07/15/13 | 07/15/13 15:32 | EPA 7471A/R3QA131 |
| Selenium | U | | 73.1 | 10 | 07/11/13 | 07/17/13 13:16 | SW6010B/R3QA159 |
| Silver | U | | 3.7 | 10 | 07/11/13 | 07/17/13 13:16 | SW6010B/R3QA159 |

TCLP Extracted Metals**Targets**

| Analyte | Result mg/L | Flags Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|----------|----------------|---------------------|-----------------------|----------|----------|----------------|------------------|
| Arsenic | U | | 0.800 | 4 | 06/19/13 | 06/25/13 12:58 | EPA 1311/R3QA159 |
| Barium | U | | 0.800 | 4 | 06/19/13 | 06/25/13 12:58 | EPA 1311/R3QA159 |
| Cadmium | U | | 0.020 | 4 | 06/19/13 | 06/25/13 12:58 | EPA 1311/R3QA159 |
| Chromium | U | | 0.060 | 4 | 06/19/13 | 06/25/13 12:58 | EPA 1311/R3QA159 |
| Lead | 1.01 | | 0.200 | 4 | 06/19/13 | 06/25/13 12:58 | EPA 1311/R3QA159 |
| Mercury | U | | 0.0002 | 1 | 07/08/13 | 07/08/13 13:12 | EPA 1311/R3QA135 |
| Selenium | U | | 0.800 | 4 | 06/19/13 | 06/25/13 12:58 | EPA 1311/R3QA159 |
| Silver | U | | 0.040 | 4 | 06/19/13 | 06/25/13 12:58 | EPA 1311/R3QA159 |



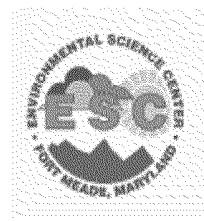
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**Site Name:** Super salvage**Project #:** NSF 647**Station ID:** SS5**Lab ID:** 1306003-05**Sample Matrix:** Petroleum**Date Collected:** 05/29/2013**Total Metals****Targets**

| Analyte | Result ug/g | Flags Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|----------|----------------|---------------------|-----------------------|----------|----------|----------------|-----------------|
| Arsenic | U | | 11.0 | 1 | 06/19/13 | 07/01/13 10:28 | SW6010B/R3QA159 |
| Barium | U | | 11.0 | 1 | 06/19/13 | 07/01/13 10:28 | SW6010B/R3QA159 |
| Cadmium | U | | 0.3 | 1 | 06/19/13 | 07/01/13 10:28 | SW6010B/R3QA159 |
| Chromium | 2.0 | | 0.5 | 1 | 06/19/13 | 07/01/13 10:28 | SW6010B/R3QA159 |
| Lead | 18.3 | | 2.7 | 1 | 06/19/13 | 07/01/13 10:28 | SW6010B/R3QA159 |
| Selenium | U | J | 11.0 | 1 | 06/19/13 | 07/01/13 10:28 | SW6010B/R3QA159 |
| Silver | U | | 0.5 | 1 | 06/19/13 | 07/01/13 10:28 | SW6010B/R3QA159 |



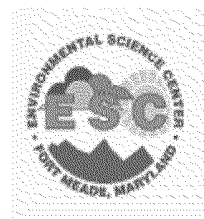
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**Site Name:** Super salvage**Project #:** NSF 647**Station ID:** SS5**Lab ID:** 1306003-06**Sample Matrix:** Water**Date Collected:** 05/29/2013**Total Metals****Targets**

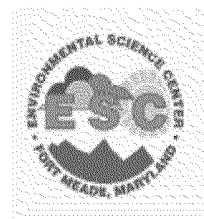
| Analyte | Result ug/L | Flags Qualifiers | Quantitation Limit | Dilution | Prepared | Analyzed | Method/SOP# |
|-------------|----------------|---------------------|-----------------------|----------|----------|----------------|-----------------|
| Arsenic | U | | 200 | 1 | 06/19/13 | 06/25/13 13:22 | SW6010B/R3QA159 |
| Barium | U | | 200 | 1 | 06/19/13 | 06/25/13 13:22 | SW6010B/R3QA159 |
| Cadmium | U | | 5.0 | 1 | 06/19/13 | 06/25/13 13:22 | SW6010B/R3QA159 |
| Chromium | U | | 10.0 | 1 | 06/19/13 | 06/25/13 13:22 | SW6010B/R3QA159 |
| Lead | 85.9 | | 50.0 | 1 | 06/19/13 | 06/25/13 13:22 | SW6010B/R3QA159 |
| Selenium | U | | 200 | 1 | 06/19/13 | 06/25/13 13:22 | SW6010B/R3QA159 |
| Silver | U | | 10.0 | 1 | 06/19/13 | 06/25/13 13:22 | SW6010B/R3QA159 |



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Site Name: Super salvage

Project #: NSF 647

QC Data
TCLP Extracted Metals

| Analyte | Result | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch BF31701 - Metals Water Prep

| | | | | | | | | | | |
|--------------------------|--------|-------|------|--------------------------|--|--------------------------|--------|--------------------------|----|---|
| Blank (BF31701-BLK1) | | | | Prepared: 06/17/13 07:27 | | Analyzed: 06/25/13 12:24 | | | | |
| Arsenic | U | 0.200 | mg/L | | | | | | | |
| Barium | U | 0.200 | " | | | | | | | |
| Cadmium | U | 0.005 | " | | | | | | | |
| Chromium | U | 0.015 | " | | | | | | | |
| Lead | U | 0.050 | " | | | | | | | |
| Selenium | U | 0.200 | " | | | | | | | |
| Silver | U | 0.010 | " | | | | | | | |
| LCS (BF31701-BS1) | | | | Prepared: 06/17/13 07:27 | | Analyzed: 06/25/13 12:35 | | | | |
| Arsenic | 1.024 | 0.200 | mg/L | 1.0000 | | 102 | 85-115 | | | |
| Barium | 4.054 | 0.200 | " | 4.0000 | | 101 | 85-115 | | | |
| Cadmium | 0.0982 | 0.005 | " | 0.10000 | | 98 | 85-115 | | | |
| Chromium | 1.013 | 0.015 | " | 1.0000 | | 101 | 85-115 | | | |
| Lead | 0.9388 | 0.050 | " | 1.0000 | | 94 | 85-115 | | | |
| Selenium | 1.060 | 0.200 | " | 1.0000 | | 106 | 85-115 | | | |
| Silver | 0.0944 | 0.010 | " | 0.10000 | | 94 | 85-115 | | | |
| Duplicate (BF31701-DUP1) | | | | Source: 1306003-02 | | Prepared: 06/17/13 07:27 | | Analyzed: 06/25/13 12:48 | | |
| Arsenic | U | 0.800 | mg/L | U | | | | | 20 | |
| Barium | 0.5727 | 0.800 | " | 0.6072 | | | | 6 | 20 | |
| Cadmium | 0.0004 | 0.020 | " | U | | | | 200 | 20 | D |
| Chromium | U | 0.060 | " | U | | | | | 20 | |
| Lead | 0.0233 | 0.200 | " | 0.0265 | | | | 13 | 20 | |
| Selenium | U | 0.800 | " | U | | | | | 20 | |
| Silver | U | 0.040 | " | U | | | | | 20 | |
| Duplicate (BF31701-DUP2) | | | | Source: 1306003-06 | | Prepared: 06/17/13 07:27 | | Analyzed: 06/25/13 13:25 | | |
| Arsenic | 0.0042 | 0.200 | mg/L | U | | | | 200 | 20 | D |
| Barium | 0.0431 | 0.200 | " | 0.0438 | | | | 2 | 20 | |
| Cadmium | 0.0014 | 0.005 | " | 0.0014 | | | | 2 | 20 | |
| Chromium | 0.0020 | 0.015 | " | U | | | | 200 | 20 | D |
| Lead | 0.0814 | 0.050 | " | 0.0859 | | | | 5 | 20 | |
| Selenium | U | 0.200 | " | 0.0049 | | | | | 20 | |
| Silver | 0.0014 | 0.010 | " | 0.0011 | | | | 19 | 20 | |



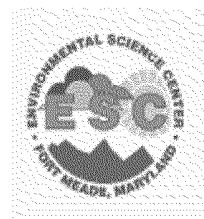
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701 Mapes Road

Fort Meade, Maryland 20755-5350



Site Name: Super salvage

Project #: NSF 647

QC Data
TCLP Extracted Metals

| Analyte | Result | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

Batch BF31701 - Metals Water Prep

| Matrix Spike (BF31701-MS1) | | Source: 1306003-04 | | Prepared: 06/17/13 07:27 | | Analyzed: 06/25/13 13:03 | |
|----------------------------|--------|--------------------|------|--------------------------|--------|--------------------------|--------|
| Arsenic | 1.091 | 0.800 | mg/L | 1.0000 | U | 109 | 70-130 |
| Barium | 4.181 | 0.800 | " | 4.0000 | 0.2431 | 98 | 70-130 |
| Cadmium | 0.1168 | 0.020 | " | 0.10000 | 0.0193 | 98 | 70-130 |
| Chromium | 0.9817 | 0.060 | " | 1.0000 | U | 98 | 70-130 |
| Lead | 1.943 | 0.200 | " | 1.0000 | 1.008 | 94 | 70-130 |
| Selenium | 0.9371 | 0.800 | " | 1.0000 | U | 94 | 70-130 |
| Silver | 0.0983 | 0.040 | " | 0.10000 | 0.0098 | 89 | 70-130 |

| Matrix Spike (BF31701-MS2) | | Source: 1306003-06 | | Prepared: 06/17/13 07:27 | | Analyzed: 06/25/13 13:28 | |
|----------------------------|--------|--------------------|------|--------------------------|--------|--------------------------|--------|
| Arsenic | 1.075 | 0.200 | mg/L | 1.0000 | U | 107 | 70-130 |
| Barium | 4.304 | 0.200 | " | 4.0000 | 0.0438 | 107 | 70-130 |
| Cadmium | 0.1040 | 0.005 | " | 0.10000 | 0.0014 | 103 | 70-130 |
| Chromium | 1.082 | 0.015 | " | 1.0000 | U | 108 | 70-130 |
| Lead | 1.087 | 0.050 | " | 1.0000 | 0.0859 | 100 | 70-130 |
| Selenium | 1.154 | 0.200 | " | 1.0000 | 0.0049 | 115 | 70-130 |
| Silver | 0.0976 | 0.010 | " | 0.10000 | 0.0011 | 96 | 70-130 |

Batch BG30201 - Mercury 245.1/245.2/7470a Prep

| | | | | | | | |
|--------------------------|----------|--------------------|------|--------------------------|----|--------------------------|--|
| Blank (BG30201-BLK1) | | | | Prepared: 07/08/13 12:00 | | Analyzed: 07/08/13 13:04 | |
| Mercury | U | 0.0002 | mg/L | | | | |
| LCS (BG30201-BS1) | | | | Prepared: 07/08/13 12:00 | | Analyzed: 07/08/13 13:10 | |
| Mercury | 0.001970 | 0.0002 | mg/L | 0.0020000 | 98 | 85-115 | |
| Duplicate (BG30201-DUP1) | | Source: 1306003-04 | | Prepared: 07/08/13 12:00 | | Analyzed: 07/08/13 13:14 | |
| Mercury | 0.000080 | 0.0002 | mg/L | 0.000080 | 0 | 20 | |



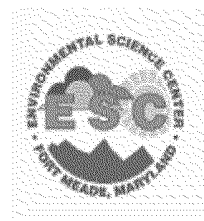
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center

Office of Analytical Services and Quality Assurance

701 Mapes Road

Fort Meade, Maryland 20755-5350



Site Name: Super salvage

Project #: NSF 647

QC Data
TCLP Extracted Metals

| Analyte | Result | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|--|----------|-----------------------|-------|--------------------------|------------------|--------------------------|----------------|-----|--------------|-------|
| Batch BG30201 - Mercury 245.1/245.2/7470a Prep | | | | | | | | | | |
| Matrix Spike (BG30201-MS1) | | Source: 1306003-04 | | Prepared: 07/08/13 12:00 | | Analyzed: 07/08/13 13:16 | | | | |
| Mercury | 0.002070 | 0.0002 | mg/L | 0.0020000 | 0.000080 | 99 | 70-130 | | | |



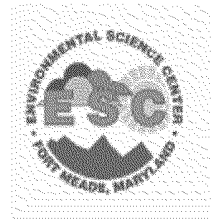
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Region 3 Environmental Science Center

Office of Analytical Services and Quality Assurance

701 Mapes Road

Fort Meade, Maryland 20755-5350



Site Name: Super salvage

Project #: NSF 647

QC Data
Total Metals

| Analyte | Result | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

Batch BF31701 - Metals Water Prep

| Duplicate (BF31701-DUP2) | | Source: 1306003-06 | | Prepared: 06/17/13 07:27 | | Analyzed: 06/25/13 13:25 | |
|--------------------------|---------|--------------------|------|--------------------------|--|--------------------------|----|
| Arsenic | U | 200 | ug/L | U | | | 20 |
| Barium | 43.1176 | 200 | " | 43.8472 | | 2 | 20 |
| Cadmium | 1.37915 | 5.0 | " | 1.35248 | | 2 | 20 |
| Chromium | 1.97615 | 10.0 | " | U | | | 20 |
| Lead | 81.4270 | 50.0 | " | 85.9028 | | 5 | 20 |
| Selenium | U | 200 | " | U | | | 20 |
| Silver | 1.37543 | 10.0 | " | 1.14144 | | 19 | 20 |

| Matrix Spike (BF31701-MS2) | | Source: 1306003-06 | | Prepared: 06/17/13 07:27 | | Analyzed: 06/25/13 13:28 | |
|----------------------------|---------|--------------------|------|--------------------------|---------|--------------------------|--------|
| Arsenic | 1074.64 | 200 | ug/L | 1000.0 | U | 107 | 70-130 |
| Barium | 4304.40 | 200 | " | 4000.0 | 43.8472 | 107 | 70-130 |
| Cadmium | 103.953 | 5.0 | " | 100.00 | 1.35248 | 103 | 70-130 |
| Chromium | 1082.16 | 10.0 | " | 1000.0 | U | 108 | 70-130 |
| Lead | 1086.88 | 50.0 | " | 1000.0 | 85.9028 | 100 | 70-130 |
| Selenium | 1153.69 | 200 | " | 1000.0 | U | 115 | 70-130 |
| Silver | 97.5941 | 10.0 | " | 100.00 | 1.14144 | 96 | 70-130 |

Batch BF31901 - Metals Petroleum Prep

| Blank (BF31901-BLK1) | | Prepared: 06/19/13 09:53 | | Analyzed: 07/01/13 11:29 | |
|----------------------|---|--------------------------|------|--------------------------|--|
| Arsenic | U | 20.0 | ug/g | | |
| Barium | U | 20.0 | " | | |
| Cadmium | U | 0.5 | " | | |
| Chromium | U | 1.0 | " | | |
| Lead | U | 5.0 | " | | |
| Selenium | U | 20.0 | " | | |
| Silver | U | 1.0 | " | | |



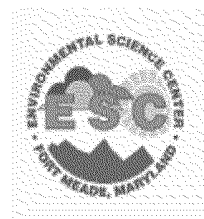
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Region 3 Environmental Science Center

Office of Analytical Services and Quality Assurance

701 Mapes Road

Fort Meade, Maryland 20755-5350



Site Name: Super salvage

Project #: NSF 647

QC Data Total Metals

| Analyte | Result | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch BF31901 - Metals Petroleum Prep

| LCS (BF31901-BS1) | | | | Prepared: 06/19/13 09:53 | | | Analyzed: 07/01/13 10:20 | | | |
|-------------------|---------|------|------|--------------------------|--|----|--------------------------|--|--|---|
| Arsenic | 89.8175 | 20.0 | ug/g | 100.00 | | 90 | 85-115 | | | |
| Barium | 355.179 | 20.0 | " | 400.00 | | 89 | 85-115 | | | |
| Cadmium | 8.74406 | 0.5 | " | 10.000 | | 87 | 85-115 | | | |
| Chromium | 92.3469 | 1.0 | " | 100.00 | | 92 | 85-115 | | | |
| Lead | 83.7128 | 5.0 | " | 100.00 | | 84 | 85-115 | | | A |
| Selenium | 92.7312 | 20.0 | " | 100.00 | | 93 | 85-115 | | | |
| Silver | 9.53259 | 1.0 | " | 10.000 | | 95 | 85-115 | | | |

| Duplicate (BF31901-DUP1) | | | | Source: 1306003-05 | | | Prepared: 06/19/13 09:53 | | | Analyzed: 07/01/13 10:31 | |
|--------------------------|----------|------|------|--------------------|--|--|--------------------------|--|----|--------------------------|---|
| Arsenic | U | 11.0 | ug/g | U | | | | | | 35 | |
| Barium | 4.38213 | 11.0 | " | 4.55234 | | | | | 4 | 35 | |
| Cadmium | 0.048401 | 0.3 | " | 0.074799 | | | | | 43 | 35 | D |
| Chromium | 1.88888 | 0.5 | " | 1.99836 | | | | | 6 | 35 | |
| Lead | 17.2077 | 2.7 | " | 18.2936 | | | | | 6 | 35 | |
| Selenium | U | 11.0 | " | U | | | | | | 35 | |
| Silver | 0.128190 | 0.5 | " | 0.161529 | | | | | 23 | 35 | |

| Matrix Spike (BF31901-MS1) | | | | Source: 1306003-05 | | | Prepared: 06/19/13 09:53 | | | Analyzed: 07/01/13 10:34 | |
|----------------------------|---------|-----|------|--------------------|----------|-----|--------------------------|--|--|--------------------------|--|
| Arsenic | 45.0254 | 9.4 | ug/g | 46.992 | U | 96 | 70-130 | | | | |
| Barium | 188.446 | 9.4 | " | 187.97 | 4.55234 | 98 | 70-130 | | | | |
| Cadmium | 4.64270 | 0.2 | " | 4.6992 | 0.074799 | 97 | 70-130 | | | | |
| Chromium | 49.6845 | 0.5 | " | 46.992 | 1.99836 | 101 | 70-130 | | | | |
| Lead | 60.7251 | 2.3 | " | 46.992 | 18.2936 | 90 | 70-130 | | | | |
| Selenium | 46.5252 | 9.4 | " | 46.992 | U | 99 | 70-130 | | | | |
| Silver | 4.98310 | 0.5 | " | 4.6992 | 0.161529 | 103 | 70-130 | | | | |

| Reference (BF31901-SRM1) | | | | Prepared: 06/19/13 09:53 | | | Analyzed: 07/01/13 10:23 | | | |
|--------------------------|---------|------|------|--------------------------|--|-----|--------------------------|--|--|---|
| Arsenic | 156.021 | 40.3 | ug/g | 161.00 | | 97 | 80-120 | | | |
| Barium | 232.047 | 40.3 | " | 252.00 | | 92 | 82-118 | | | |
| Cadmium | 120.025 | 1.0 | " | 128.00 | | 94 | 81-125 | | | |
| Chromium | 64.9122 | 2.0 | " | 69.500 | | 93 | 79-121 | | | |
| Lead | 134.390 | 10.1 | " | 142.00 | | 95 | 80-120 | | | |
| Selenium | 25.5804 | 40.3 | " | 64.200 | | 40 | 76-124 | | | A |
| Silver | 136.519 | 2.0 | " | 130.00 | | 105 | 53-147 | | | |



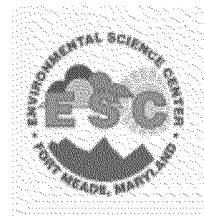
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 3 Environmental Science Center

Office of Analytical Services and Quality Assurance

701 Mapes Road

Fort Meade, Maryland 20755-5350



Site Name: Super salvage

Project #: NSF 647

QC Data
Total Metals

| Analyte | Result | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|--------------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch BG31002 - Metals Solid prep

Blank (BG31002-BLK1)

Prepared: 07/11/13 11:53

Analyzed: 07/17/13 12:01

| | | | |
|----------|---|------|------|
| Arsenic | U | 20.0 | ug/g |
| Barium | U | 20.0 | " |
| Cadmium | U | 0.5 | " |
| Chromium | U | 1.0 | " |
| Lead | U | 5.0 | " |
| Selenium | U | 20.0 | " |
| Silver | U | 1.0 | " |

LCS (BG31002-BS1)

Prepared: 07/11/13 11:53

Analyzed: 07/17/13 12:47

| | | | | | | |
|----------|---------|------|------|--------|----|--------|
| Arsenic | 196.200 | 20.0 | ug/g | 200.00 | 98 | 85-115 |
| Barium | 770.686 | 20.0 | " | 800.00 | 96 | 85-115 |
| Cadmium | 18.7411 | 0.5 | " | 20.000 | 94 | 85-115 |
| Chromium | 197.906 | 1.0 | " | 200.00 | 99 | 85-115 |
| Lead | 176.284 | 5.0 | " | 200.00 | 88 | 85-115 |
| Selenium | 179.400 | 20.0 | " | 200.00 | 90 | 85-115 |
| Silver | 17.6168 | 1.0 | " | 20.000 | 88 | 85-115 |

Duplicate (BG31002-DUP1)

Source: 1306003-01

Prepared: 07/11/13 11:53

Analyzed: 07/17/13 12:57

| | | | | | | | |
|----------|---------|------|------|---------|-----|----|---|
| Arsenic | 46.5551 | 192 | ug/g | 21.9124 | 72 | 35 | D |
| Barium | 256.458 | 192 | " | 271.190 | 6 | 35 | |
| Cadmium | 6.50957 | 4.8 | " | 7.26543 | 11 | 35 | |
| Chromium | 1680.14 | 9.6 | " | 2036.63 | 19 | 35 | |
| Lead | 1471.25 | 47.9 | " | 1556.25 | 6 | 35 | |
| Selenium | 6.78831 | 192 | " | 21.5040 | 104 | 35 | D |
| Silver | 68.5963 | 9.6 | " | 75.5045 | 10 | 35 | |

Matrix Spike (BG31002-MS1)

Source: 1306003-02

Prepared: 07/11/13 11:53

Analyzed: 07/17/13 13:06

| | | | | | | | | |
|----------|---------|------|------|--------|---------|----|--------|----|
| Arsenic | 240.400 | 200 | ug/g | 200.00 | 45.5871 | 97 | 70-130 | |
| Barium | 988.324 | 200 | " | 800.00 | 285.054 | 88 | 70-130 | |
| Cadmium | 28.8840 | 5.0 | " | 20.000 | 10.4427 | 92 | 70-130 | |
| Chromium | 517.217 | 10.0 | " | 200.00 | 416.558 | 50 | 70-130 | A |
| Lead | 2620.87 | 50.0 | " | 200.00 | 3145.00 | NR | 70-130 | TD |
| Selenium | 165.000 | 200 | " | 200.00 | 7.90200 | 79 | 70-130 | |
| Silver | 87.8572 | 10.0 | " | 20.000 | 116.280 | NR | 70-130 | TD |



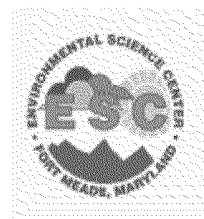
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701 Mapes Road

Fort Meade, Maryland 20755-5350



Site Name: Super salvage

Project #: NSF 647

QC Data
Total Metals

| Analyte | Result | Quantitation Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|-----------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

Batch BG31002 - Metals Solid prep

| Reference (BG31002-SRM1) | | | | Prepared: 07/11/13 11:53 | | Analyzed: 07/17/13 12:04 | |
|--------------------------|---------|------|------|--------------------------|----|--------------------------|--|
| Arsenic | 155.044 | 44.4 | ug/g | 161.00 | 96 | 80-120 | |
| Barium | 233.311 | 44.4 | " | 252.00 | 93 | 82-118 | |
| Cadmium | 121.062 | 1.1 | " | 128.00 | 95 | 81-125 | |
| Chromium | 64.7080 | 2.2 | " | 69.500 | 93 | 79-121 | |
| Lead | 132.903 | 11.1 | " | 142.00 | 94 | 80-120 | |
| Selenium | 61.1778 | 44.4 | " | 64.200 | 95 | 76-124 | |
| Silver | 120.825 | 2.2 | " | 130.00 | 93 | 53-147 | |

Batch BG31503 - Mercury 245.5/7471a Prep

| Blank (BG31503-BLK1) | | | | Prepared: 07/15/13 12:00 | | Analyzed: 07/15/13 14:58 | |
|----------------------------|---------|------|------|--------------------------|---------|--------------------------|--------|
| Mercury | U | 0.1 | ug/g | | | | |
| LCS (BG31503-BS1) | | | | Prepared: 07/15/13 12:00 | | Analyzed: 07/15/13 15:00 | |
| Mercury | 1.04500 | 0.1 | ug/g | 1.0000 | 104 | 85-115 | |
| Duplicate (BG31503-DUP1) | | | | Prepared: 07/15/13 12:00 | | Analyzed: 07/15/13 15:34 | |
| Mercury | 3.72350 | 0.2 | ug/g | 2.82000 | 28 | 35 | |
| Matrix Spike (BG31503-MS1) | | | | Prepared: 07/15/13 12:00 | | Analyzed: 07/15/13 15:08 | |
| Mercury | 2.10860 | 0.09 | ug/g | 0.90498 | 2.82000 | NR | 70-130 |
| Reference (BG31503-SRM1) | | | | Prepared: 07/15/13 12:00 | | Analyzed: 07/15/13 15:29 | |
| Mercury | 3.06579 | 0.1 | ug/g | 2.8000 | 109 | 68-132 | A |



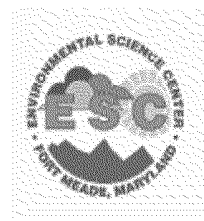
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Site Name: Super salvage

Project #: NSF 647

Notes and Definitions

- TD Spike concentration is too dilute for accurate quantitation resulting in inaccurate recovery calculations..
- J The identification of the analyte is acceptable; the reported value is an estimate.
- D Source sample result and/or duplicate sample result are below the quantitation limit and the RPD is artificially high. Precision data (RPD value) has no significance for this QC Sample.
- A Quality control value is outside acceptance limits.
- %REC Percent Recovery
- RPD Relative Percent Difference
- U Analyte included in the analysis, but not detected at or above the quantitation limit.

Quantitation Limit: The lowest concentration of an analyte that can be reliably measured within specified limits of precision and accuracy for a specific laboratory analytical method and that takes into account analytical adjustments made during sample preparation and analysis.

REPORTING PROTOCOL FOR SOLID SAMPLE RESULTS: Percent Solids (percent dry wt at 105 degrees C) determinations are routinely performed for most organic and inorganic analyses. Consequently, these samples are analyzed wet and converted to a dry weight result for reporting purposes. If metals and mercury analyses are requested, they are routinely prepared for analyses by an initial drying at 60 degrees C, homogenized prior to digestion, and are analyzed and reported on a dry weight basis. Oil-type samples are analyzed and reported on a wet weight basis for all analyses because of the nature of the sample matrix. Any exceptions to this protocol will be noted in the narrative.



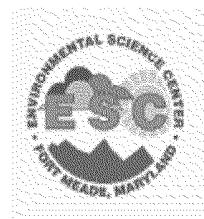
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Region 3 Environmental Science Center

Office of Analytical Services and Quality Assurance

701 Mapes Road

Fort Meade, Maryland 20755-5350



Items for Project Manager Review

| LabNumber | Analysis | Analyte | Exception |
|--------------|---|-------------|---|
| | Total Mercury by SW846 7471A | (Solid) | Special Units: (ug/g) |
| | Total Mercury for TCLP analysis by SW846 1311 | (Water) | Special Units: (mg/L) |
| | Total Metals based on SW846 6010B | (Petroleum) | Special Units: (ug/g) |
| | Total Metals based on SW846 6010B | (Solid) | Special Units: (ug/g) |
| | Total Metals based on SW846 6010B | (Water) | Special Units: (ug/L) |
| | Total Metals for TCLP analysis by 1311 | (Water) | Special Units: (mg/L) |
| 1306003-01 | Total Metals for TCLP analysis by 1311 | | Solid batched as Water |
| 1306003-02 | Total Metals for TCLP analysis by 1311 | | Solid batched as Water |
| 1306003-03 | Total Metals for TCLP analysis by 1311 | | Solid batched as Water |
| 1306003-04 | Total Mercury by SW846 7471A | | Sampled->Prepared > 28.00 days |
| 1306003-04 | Total Mercury for TCLP analysis by SW846 1311 | | Sampled->Prepared > 28.00 days |
| 1306003-04 | Total Mercury for TCLP analysis by SW846 1311 | | Solid batched as Water |
| 1306003-04 | Total Metals for TCLP analysis by 1311 | | Solid batched as Water |
| BF31701-DUP1 | Total Metals for TCLP analysis by 1311 | Cadmium | Exceeds RPD control limit |
| BF31701-DUP2 | Total Metals for TCLP analysis by 1311 | Arsenic | Exceeds RPD control limit |
| BF31701-DUP2 | Total Metals for TCLP analysis by 1311 | Chromium | Exceeds RPD control limit |
| BF31901-BS1 | Total Metals based on SW846 6010B | Lead | Exceeds lower control limit |
| BF31901-DUP1 | Total Metals based on SW846 6010B | Cadmium | Exceeds RPD control limit |
| BF31901-SRM1 | Total Metals based on SW846 6010B | Selenium | Exceeds lower control limit |
| BG31002-DUP1 | Total Metals based on SW846 6010B | Arsenic | Exceeds RPD control limit |
| BG31002-DUP1 | Total Metals based on SW846 6010B | Selenium | Exceeds RPD control limit |
| BG31002-MS1 | Total Metals based on SW846 6010B | Chromium | Exceeds lower control limit |
| BG31002-MS1 | Total Metals based on SW846 6010B | Lead | Exceeds lower control limit |
| BG31002-MS1 | Total Metals based on SW846 6010B | Silver | Exceeds lower control limit |
| BG31002-MS1 | Total Metals based on SW846 6010B | Lead | TD: Spike concentration is too dilute for accurate quantitation resulting in inaccurate recovery calculations.. |
| BG31002-MS1 | Total Metals based on SW846 6010B | Silver | TD: Spike concentration is too dilute for accurate quantitation resulting in inaccurate recovery calculations.. |



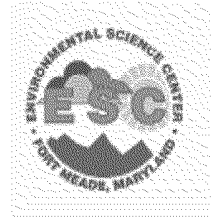
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Items for Project Manager Review

| LabNumber | Analysis | Analyte | Exception |
|-------------|---------------------------------|---------|-----------------------------|
| BG31503-MS1 | Total Mercury by SW846 7471A | Mercury | Exceeds lower control limit |